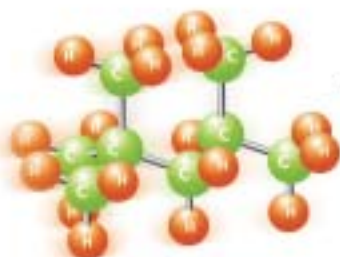


How a Fuel Cell Works

Fuel cells use hydrogen with oxygen from air to produce electricity

The electricity generated can power vehicles, buildings and portable electronics. Hydrogen can be produced from a variety of fuels, including gasoline, methanol, ethanol, and natural gas.



Gasoline



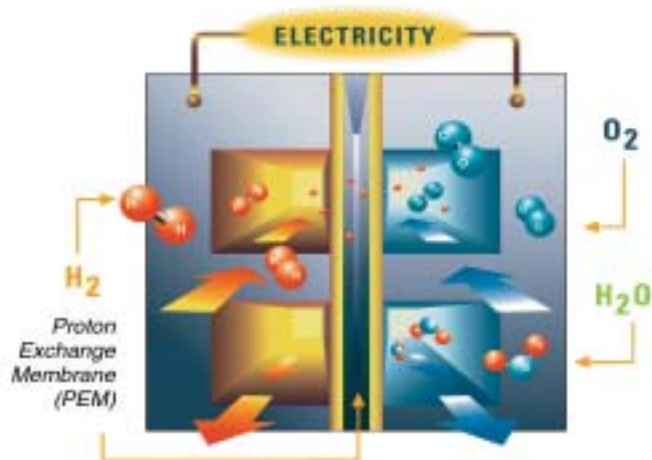
Methanol



Methane (Natural Gas)

Hydrogen can also be produced through electrolysis, a process that splits water into hydrogen and oxygen using electricity. In the future, hydrogen may be supplied from solar, wind, and other renewable energy sources.





When hydrogen enters a PEM fuel cell, its electrons and protons are separated. A membrane in the cell selectively allows the protons to pass through, while the electrons are routed to provide the electricity to run a motor, provide lighting or power other electrical functions. On the other side of the membrane, the hydrogen combines with oxygen from the air to form water and heat.

